

ABB BALDOR RELIANCE III

Customer information packet

EWDM4102T

20HP, 1175RPM, 3PH, 60HZ, 286T, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	286T
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	20.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1200 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA EEV NEMA PREMIUM UR
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	52.000 A @ 230.0 V 26.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Not Electrically Isolated
Enclosure Modification	Severe Duty Features
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	26.0 a

Part Detail

Revision	J
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	10WGZ467
Layout	10LYN057
Eff. date	02-14-2024
CD Diagram	CD0180
Poles	06
Leads	9#10
Proprietary	False
Created date	08-19-2019

Insulation Class	F
Inverter Code	Inverter Duty
IP Rating	IP55
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	1800 rpm
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1056M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	27.56 IN
Power Factor	78
Product Family	Washdown Features
Pulley Face Code	Standard
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	1.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	1175 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP1669L									
CAT.NO.	EWDM4102T								
SPEC.	10-0000-1005								
HP	20								
VOLTS	230/460								
AMP	52/26								
RPM	1175								
FRAME	286T		HZ	60			PH	3	
SER.F.	1.15	CODE	G	DES	B	CLASS	F		
NEMA-NOM-EFF	91.7	PF	78						
RATING	40C AMB-CONT								
CC	010A								
DE	6311		ODE	6309					
ENCL	TEFC	SN							
BLANK	20:1 VT/CT @ 1.00SF								

AC Induction Motor Performance Data

Record # 59571

Typical performance - not guaranteed values

Winding: 10WGZ467-R003				Type: 1056M		Enclosure: TEFC	
Nameplate Data				460 V, 60 Hz: Single Voltage Motor			
Rated Output (HP)		20		Full Load Torque		89.1 LB-FT	
Volts		230/460		Start Configuration		direct on line	
Full Load Amps		52/26		Breakdown Torque		236 LB-FT	
R.P.M.		1175		Pull-up Torque		95.1 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		137 LB-FT	
NEMA Design Code		B	KVA Code	Starting Current		143 A	
Service Factor (S.F.)		1.15		No-load Current		11.6 A	
NEMA Nom. Eff.		91.7	Power Factor	Line-line Res. @ 25°C		0.47101 Ω	
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		63°C	
S.F. Amps				Temp. Rise @ S.F. Load		79°C	
				Locked-rotor Power Factor		31.8	

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	41	63	73	78	80	80	79
Efficiency	88.6	92.1	92.5	91.9	90.8	89.2	91.2
Speed	1194.6	1189.1	1183.8	1177.1	1169.8	1160.7	1173
Line amperes	13.1	16.4	20.7	26.1	32	39.1	29.6

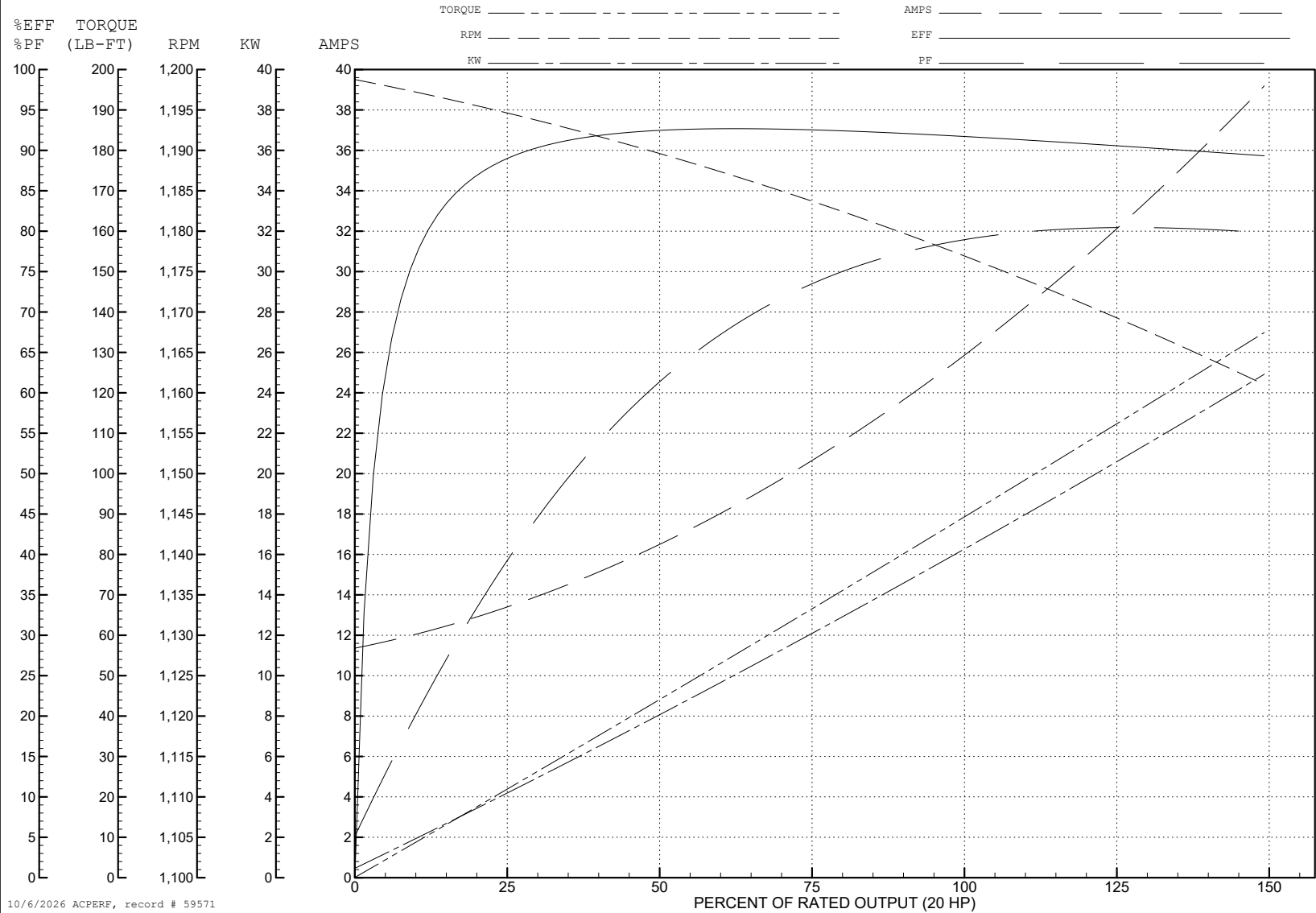
ABB Motors and Mechanical Inc.

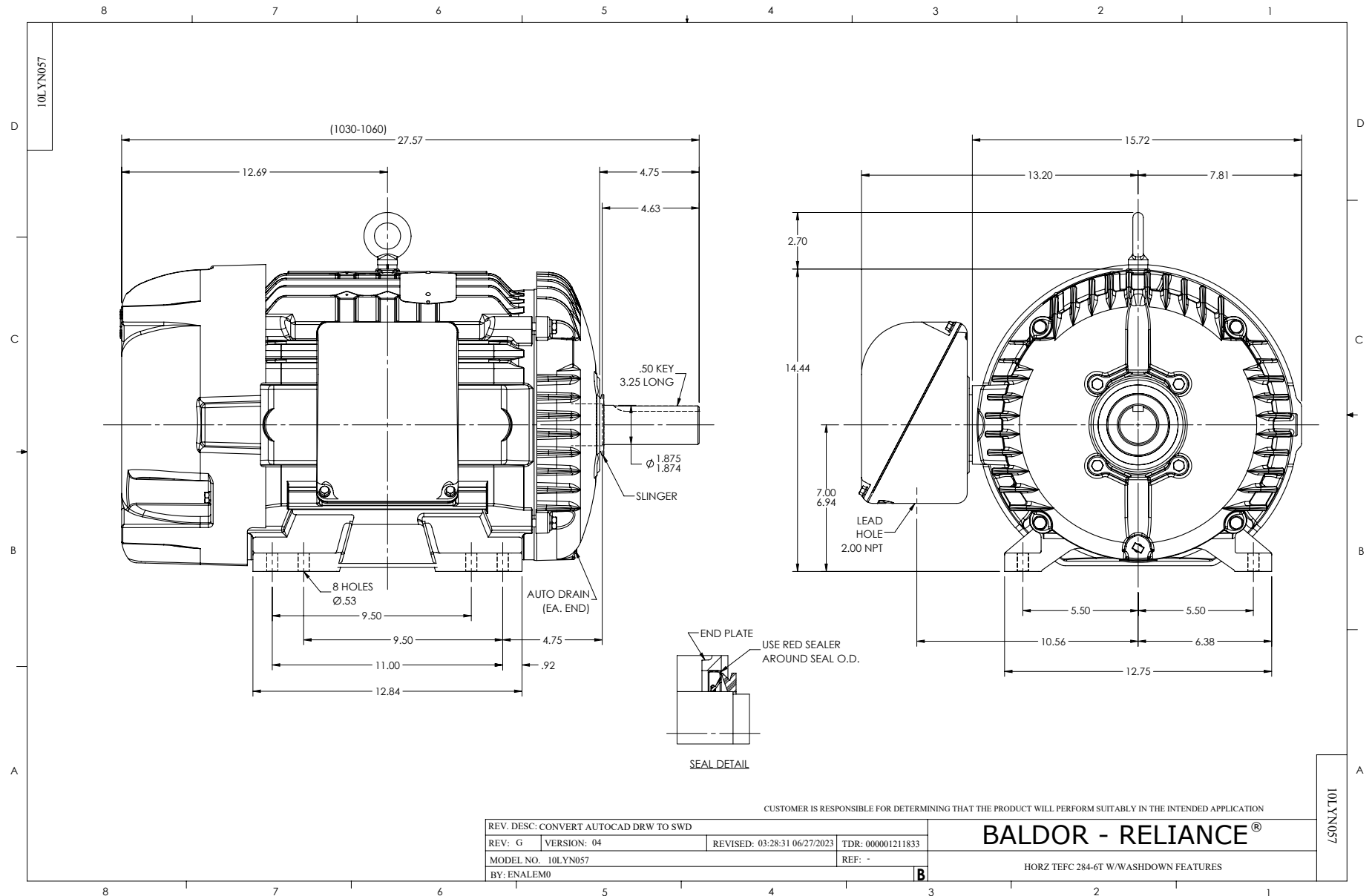
WINDING # 10WGZ467

Typical performance - not guaranteed values.

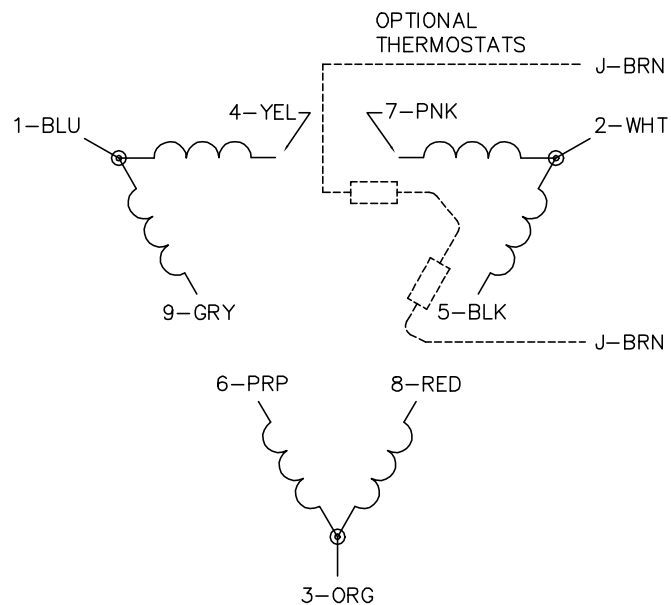
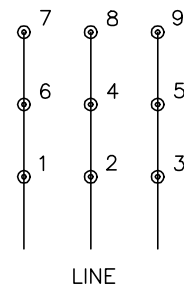
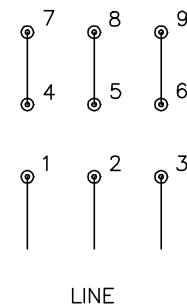
20 HP 3 PH 60 HZ 1175 RPM 460 V 1056M

TORQUES (LB-FT): PO=236 PU=95.1 LR=137 LRA=143





CD0180


 LOW VOLTAGE
(2D)

 HIGH VOLTAGE
(1D)

NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0180

REV. DESC: ADD CLASS CONN00000007

REV. LTR: D

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\148

REVISED: 10: 25: 29 02/19/2019

BY: ENBRIRO

MTL: —


BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

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